

**After-Action Report
February 20, 2001 JP-5 Spill**

**USS ABRAHAM LINCOLN
Raptor Habitat Enhancement and Stream
Improvements**

Presented to: Washington State Department of Ecology
Resource Damage Assessment Committee

Presented by: Navy Region Northwest
Naval On-Scene Coordinator

1) Location of Project:

The project was located in and along a modified stream course along the western and southern boundary of the Family Support Complex (FSC) in Marysville, Washington. This unnamed Type 4 watercourse is a tributary to Middle Fork Quilceda Creek (WRIA 07.0058). Middle Fork Quilceda Creek, a tributary to Quilceda Creek (WRIA 07.0044), is a known chinook and coho salmon spawning stream (SCPDS 1999; U.S. Navy 1998; pers. observations).

2) Description of Completed Project:

On September 6, 2001, approximately 13 crew members from the USS ABRAHAM LINCOLN installed three 12-foot tall raptor poles in the riparian area of the stream corridor to enhance bird habitat and encourage raptor hunting of over-populated vole, mice and other rodent species. Large woody debris (LWD), in the form of three large tree stumps, were hauled to the area and placed in the stream to enhance fish habitation by providing resting and hiding cover for juveniles, and to trap organic leafy materials that attracts insects, which, in turn, provides food for juvenile fish. The LWD also provide perches for birds, amphibians, and reptiles. Non-native plant species, such as blackberries and Scot's broom, were cleared from the riparian corridor of the stream to allow the previous planting efforts to continue to grow and enhance natural habitats.

3) Describe how this project benefits resources potentially affected by oil spills.

The project's three components will benefit fish and wildlife by promoting the healthy growth of native riparian plant species along the stream that have been impacted by mice, voles, and invasive non-native plants, and by enhancing habitat for aquatic species.

The benefits of maintaining the plantings along the stream include:

- healthy riparian plants will grow to provide shade and organic material to the stream, benefiting fish and shading out detrimental species like reed canary grass;
- healthy riparian areas attract birds and mammals, providing a more natural ecosystem in an otherwise degraded area;
- healthy riparian areas provide a buffer from some man-made impacts, such as fertilizers and pesticides from agriculture or landscaping activities.

The benefits of adding LWD to the stream are:

- LWD enhances fish habitat by providing resting and hiding cover for juveniles;
- LWD enhances fish habitat by trapping organic leafy materials that attracts insects, which, in turn, provides food for juvenile fish;
- LWD slows stream velocities, minimizing bank erosion and siltation of downstream salmon habitat.

4) Objectives of this project were met.

After the project was completed, the area was inspected by representatives of Naval Station Everett and Navy Region Northwest to insure that all objectives of the project had been met. The project was deemed a success and the area will be monitored in the future to observe and count raptors that use the perch poles, stream monitoring for increased salmonid species, counting plant survival rates, counting other species that utilize the LWD for perches, such as amphibians, reptiles, or birds.

5) Duration of the Project:

The crew worked for approximately 6 hours to complete the project. The photographs that follow are included for your review.





